## Standard documentation Meta information

(Definitions, comments, methods, quality)

on

## **Demographic Indicators**

This documentation is valid from/for the reference period/due day: 2002 (Cross-sectional indicators) resp. 1961 (Time series)

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## **Executive Summary**

Demographic indicators are internationally recognised and commonly used indicators for describing population structures and population movements. The oldest known demographic indicators are the age-specific survival probabilities in John Graunt's "Bills of Mortality" from 1662.

Whereas the term "indicator" in the social sciences generally refers to a measure for operationalising a theoretical concept, i.e. the "social indicators" used there are more an attempt to make theoretical variables (such as "quality of life") measurable, demographic indicators are centuries of codified knowledge about a self-contained system. Formal demography, which places population status and movement in deterministic (accounting) relationships to one another, provides a generally recognised thematic basis for calculating demographic indicators.

Certain demographic indicators, such as mortality rates, have been calculated by official statistics in Austria for a long time (typically around censuses). A systematic and annual publication began in the 1970s. Since then, Statistics Austria has been producing population forecasts at regular intervals using the cohort component method, which is why it became necessary to calculate a large number of indicators (especially age-specific mortality rates and fertility rates for Austria and the federal provinces) on an annual basis.

In the years 2008-2014, the system of demographic indicators was fundamentally expanded and modernised. Since then, it has been published annually in three table systems: comprehensive cross-sectional (period) indicators from 2002, extended time series for Austria and the federal states from 1961, cohort (longitudinal) indicators for Austria. In 2023, basic indicators were supplemented by the characteristics of education and employment status.

Applications of the demographic indicators are, on the one hand, population forecasts and, on the other hand, the analysis of demographic processes, which differs from the pure description in that a separation between demographically determined structural effects and individual behavioural effects is aimed at. E.G.: Is the number of births falling because the individual's propensity to give birth is decreasing, or because there are fewer women of reproductive age than before?

Basic indicators of demographic processes are the duration-specific demographic rates (e.g. age-specific fertility rates, age-specific mortality rates, marriage duration-specific divorce rates). These are condensed into descriptive summary measures, e.g. total fertility rate, average fertility age, life expectancy at birth, total divorce rate.

The demographic indicators are mostly calculated on the basis of secondary statistics (based on administrative data with complete coverage of the population of interest). The most important data sources are the population register, migration statistics, statistics on civil status (births,

deaths, marriages), statistics on divorces and statistics on naturalisations. For some indicators, information from the sample surveys micro-census Labour Force Survey and EU-SILC is also used.

Due to the mathematical basis of demographic indicators, their comparability over time and with other countries is basically given (numerous demographic indicators are also published by Eurostat and the United Nations). However, there may be minor breaks in time series due to changes in the data sources. For example, as of 2009, deaths on foreign territory are also recorded, which is why life expectancy as of 2009 is somewhat lower than it would be without these events abroad. One factor that influences the international comparability of demographic indicators is the varying accuracy of the current (updated or register-based) population figures.

Demographic indicators – Main Key Points	
Subject matter	Description of demographic processes and structures by means of established methods and indicators of demography (in particular demographic rates and their summary measures).
Population	<ul><li>(i) The population of Austria as an annual average or at the end of the end of the year (period indicators)</li><li>(ii) Selected populations of Austria with a common origin event, e.g. birth cohorts (cohort indicators)</li></ul>
Type of statistics	Model-based statistics
Data sources/Survey techniques	Population register (from 2002) or population update (until 2001), migration statistics, statistics on civil status (births, deaths, marriages), statistics on divorces, statistics on naturalisations, microcensus, EU-SILC
Reference period or due day	Varies according to indicator, period indicators since 1961 at the earliest (e.g. total fertility rate, life expectancy).
Periodicity	Annual
Survey participation (in case of a survey)	Not applicable
Main legal acts	Federal Statistics Act
Most detailed regional breakdown	For period indicators, depending on the indicator, either political districts (e.g. total fertility rate) or federal states (e.g. total divorce rate), cohort indicators are only shown for Austria as a whole.
Availability of results	Final period indicators for a reporting year in July of the following year, final time series and cohort indicators at the end of the following year
Other	Partial use of estimates from sample surveys in the calculation of certain indicators (e.g. life expectancy in health